



SEQUENCE LISTING

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<120> NOVEL HEME PEPTIDE

<130> N0008.0001

<140> 10/507,156

<141> 2004-09-07

<150> PCT/JP03/02394

<151> 2003-02-28

<150> JP 2002-058086

<151> 2002-03-04

<160> 18

<170> PatentIn Ver. 3.2

<210> 1

<211> 104

<212> PRT

<213> Equus caballus

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Gly Asp Val Glu Lys Gly Lys Lys Ile Phe Val Gln Lys Cys Ala Gln
1 5 10 15

Cys His Thr Val Glu Lys Gly Gly Lys His Lys Thr Gly Pro Asn Leu
20 25 30

His Gly Leu Phe Gly Arg Lys Thr Gly Gln Ala Pro Gly Phe Thr Tyr
35 40 45

Thr Asp Ala Asn Lys Asn Lys Gly Ile Thr Trp Lys Glu Glu Thr Leu
50 55 60

Met Glu Tyr Leu Glu Asn Pro Lys Lys Tyr Ile Pro Gly Thr Lys Met
65 70 75 80

Ile Phe Ala Gly Ile Lys Lys Lys Thr Glu Arg Glu Asp Leu Ile Ala
85 90 95

Tyr Leu Lys Lys Ala Thr Asn Glu
100

<210> 2

<211> 85

<212> PRT

<213> Porphyra yezoensis

<400> 2

Ala Asp Leu Asp Asn Gly Glu Lys Val Phe Ser Ala Asn Cys Ala Ala
 1 5 10 15

Cys His Ala Gly Gly Asn Asn Ala Ile Met Pro Asp Lys Thr Leu Lys
 20 25 30

Lys Asp Val Leu Glu Ala Asn Ser Met Asn Thr Ile Asp Ala Ile Thr
 35 40 45

Tyr Gln Val Gln Asn Gly Lys Asn Ala Met Pro Ala Phe Gly Gly Arg
 50 55 60

Leu Val Asp Glu Asp Ile Glu Asp Ala Ala Asn Tyr Val Leu Ser Gln
 65 70 75 80

Ser Glu Lys Gly Trp
 85

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<212> PRT

<213> *Porphyra yezoensis*

<400> 3

Phe Ser Ala Asn Cys Ala Ala Cys His Ala Gly Gly Asn Asn Ala
 1 5 10 15

<210> 4

<211> 9

<212> PRT

<213> *Equus caballus*

<400> 4

Cys Ala Gln Cys His Thr Val Glu Lys
 1 5

<210> 5

<211> 22

<212> PRT

<213> *Equus caballus*

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Val Gln Lys Cys Ala Gln Cys His Thr Val Glu Lys Gly Gly Lys His
 1 5 10 15

Lys Thr Gly Pro Asn Leu
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<210> 6

<211> 65

<212> PRT

<213> *Equus caballus*

<400> 6

Gly Asp Val Glu Lys Gly Lys Lys Ile Phe Val Gln Lys Cys Ala Gln
 1 5 10 15

Cys His Thr Val Glu Lys Gly Gly Lys His Lys Thr Gly Pro Asn Leu
 20 25 30

His Gly Leu Phe Gly Arg Lys Thr Gly Gln Ala Pro Gly Phe Thr Tyr
 35 40 45

Thr Asp Ala Asn Lys Asn Lys Gly Ile Thr Trp Lys Glu Glu Thr Leu
 50 55 60

Met
 65

<210> 7

<211> 9

<212> PRT

<213> Equus caballus

<400> 7

Cys Ala Gln Cys His Thr Val Glu Lys
 1 5

<210> 8

<211> 21

<212> PRT

<213> Porphyra yezoensis

<400> 8

Val Phe Ser Ala Asn Cys Ala Ala Cys His Ala Gly Gly Asn Asn Ala
 1 5 10 15

Ile Met Pro Asp Lys
 20

<210> 9

<211> 17

<212> PRT

<213> Equus caballus

<400> 9

Lys Gly Lys Lys Ile Phe Val Gln Lys Cys Ala Gln Cys His Thr Val
 1 5 10 15

Glu

<210> 10

<211> 29

<212> PRT

<213> Porphyra yezoensis

$\langle 400 \rangle$ 10

Val Phe Ser Ala Asn Cys Ala Ala Cys His Ala Gly Gly Asn Asn Ala
1 5 10 15

Ile Met Pro Asp Lys Thr Leu Lys Lys Asp Val Leu Glu
20 25

<210> 11

<211> 75

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic Formula Peptide

<220>

<221> MISC FEATURE

 $\langle 222 \rangle \quad (1) \dots (20)$

<223> this region may encompass 1-20 variable amino acids or not be present; see specification as filed for detailed description of preferred embodiments

<220>

<221> MISC FEATURE

$$\langle 222 \rangle \quad (22) \quad \bar{\cdot} \quad (23)$$

<223> any amino acid

<220>

<221> MISC FEATURE

<222> (25)

<223> His, Lys or Arg

$\langle 220 \rangle$

<221> MISC FEATURE

<222> (26) . . (75)

<223> this region may encompass 1-50 variable amino acids or not be present; see specification as filed for detailed description of preferred embodiments

<400> 11

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
50 55 60

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
65 70 75

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 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic Formula
 Peptide

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 <222> (1)..(20)
 <223> this region may encompass 1-20 variable amino acids or
 not be present; see specification as filed for detailed
 description of preferred embodiments

<220>
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 <222> (22)..(23)
 <223> Ala, Gln, Lys, Arg or Val

<220>
 <221> MISC_FEATURE
 <222> (25)
 <223> His, Lys or Arg

<220>
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 <222> (26)..(75)
 <223> this region may encompass 1-50 variable amino acids or
 not be present; see specification as filed for detailed
 description of preferred embodiments

<400> 12
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40 45
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 50 55 60
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 65 70 75

<210> 13
 <211> 75
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic Formula
 Peptide

<220>
 <221> MISC_FEATURE
 <222> (1)..(20)
 <223> this region may encompass 1-20 variable amino acids or
 not be present; see specification as filed for detailed
 description of preferred embodiments

<220>
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 <222> (23)
 <223> Gln or Ala

<220>
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 <222> (26)..(75)
 <223> this region may encompass 1-50 variable amino acids or
 not be present; see specification as filed for detailed
 description of preferred embodiments

<400> 13
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Cys Ala Xaa Cys His Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40 45
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 50 55 60
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 65 70 75

<210> 14
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 14
 Thr Val Glu Lys
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<210> 15
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<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 15

Phe Ser Ala Asn

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<210> 16

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<212> PRT

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<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 16

Ala Gly Gly Asn Asn Ala

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5

<210> 17

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 17

Val Glu Lys Cys Ala Glu Cys His Thr Val Glu

1

5

10

<210> 18

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 18

Thr Val Glu Lys Gly Gly Lys His Lys Thr Gly Pro Asn Leu

1

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